Nº 13,361 A.D. 1901

Date of Application, 1st July, 1901
Complete Specification Left, 15th Nov., 1901—Accepted, 30th Jan., 1902

PROVISIONAL SPECIFICATION.

Improved Vaginal Tube

HAYDN BROWN L.R.C.P. 44 Hamilton Gardens St. John's Wood London N.W Author do hereby declare the nature of this invention to be as follows:

My invention consists of a tube of simple construction, made in one piece out of vulcanite, or metal or glass or any other suitable material It is round or oval in section, and solid excepting a single hole running from end to end. As shewn in Fig. 1. one end enlarges into a solid spherical or bulbous shape that is usually from three to five times the circumference of the shaft, and it may be as large as seven times the shaft if desirable, in circumference. The enlargement also is solid but for the single hole passing through it. The size of the whole tube being in common cases about seven inches long may be larger or smaller than this, but its proportion as regards circumference of shaft and bulb respectively are approximately as stated, and the length may have a proportion varying between three and ten times the circumference of the bulb.

The instrument may be made by turning or moulding or in any other suitable way. It is designed for treating the vagina with chemical solutions or any other fluids.

The single bore of the tube may be of equal calibre throughout or it may vary as shewn in section Fig. 2., being dilated more or less at each end, the exit at the bulb widening out and rounding off to join the curve of the bulb. And the bore may also widen towards the shaft end to allow of its fitting on to another smaller tube not included in the invention. The spherical or bulbous enlargement merges gradually into the thinner neck of the shaft, leaving neither angle nor sharp curve.

The circumference of the shaft may be the same throughout or may slightly enlarge as it goes further away from the bulb.

In the modification shewn Fig. 3. the bulb may depart from the spherical into an oval shape on section.

Thus I claim an improvement in construction of vaginal tubes, supplying an example made in one or more pieces, having a spherical or bulbous end designed to dilate the vagina, and having no angles or rough parts to injure or collect matter. The instrument is thus easily and perfectly cleaned, on account of the bore being single. The alteration in calibre of bore is designed to govern amount of fluid passing, and for other practical purposes, if necessary.

Dated this 1st. day of July, 1901.

HAYDN BROWN.

COMPLETE SPECIFICATION.

Improved Vaginal Tube

HAYDN BROWN Author 44 Hamilton Gardens St. John's Wood London N.W. do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

My invention consists of a tube of simple construction, which is made in one piece, out of vulcanite or metal or glass or any other suitable material. It may be round or oval in section and is solid excepting a single hole running from end to end, and, excepting when made in glass when it may have cavities to be described. One end enlarges into a spherical or bulbous shape that is usually from three to five times the circumference of the rest of the tube, and may be if desirable from three to seven times the circumference of the rest of the tube. This enlargement also is solid but for the single hole passing through it, with the exception named hereafter when the invention is made of glass, and subject to the single hole dilating at its extremity also to be fully described. This single bore & solid bulb is referred to & stipulated as a contradistinction to appliances which have more complicated passages through them & 2 or more passages of exit at the extremity of the tube, and in contradistinction to appliances which have a bore that follows the shape of the external surface of the tube, more or less. The size of the whole tube is in common cases about seven inches long, but it may be larger for special purposes; its length may vary between three & ten times the circumference of the enlarged end.

The tube may be made by turning, moulding, or by any other convenient method. The single bore may be of equal & the same calibre throughout or it may vary as shown in section Fig. 2, where it enlarges towards each end of the tube, the exit at the bulb widening out in order to distribute fluid which shall pass through the tube. Fig. 1. represents the tube of which Fig. 2 is the longitudinal section. The exit opening is rounded off to meet the circumference of the bulb. The bore widens towards the shaft end of the tube to allow of its being fitted on to another smaller tube not included in the invention.

The spherical or bulbous enlargement of the tube merges gradually into the thinner part or neck of the shaft, leaving no angle or sharp curve.

The circumference of the shaft may be the same throughout or slightly increase in size as it runs away from the bulb.

In the modification Fig. 3, the bulb may depart from the spherical into an oval shape on transverse section.

As a detail in manufacture in glass, so that the instrument may be made in glass & have the advantages of a solid bulb as made in other materials—which solidity is in contradistinction to the hollow bulbs, as made by turning or moulding—and so that the instrument when made in glass may still be as light in weight as possible, I make the glass bulb hollow as regards the wall which surrounds its single bore, by turning the soft heated glass back upon the shaft of the tube or by other manipulative methods. Thus in Fig. 4 section, the bulb *a* is hollowed as shown *c*, while the single bore *e* runs through the whole instrument independent of the hollowness *c* and having no communication with it. Thus the instrument is rendered lighter in weight but practically the same in other respects as those examples made which have the bulb solid as it surrounds the single bore.

In the invention & modifications, instead of the shaft end being as shown in Figs. 1 & 2, it may be contracted at *b*, enlarged again at *d*, and contracted again at its extreme end *f*, thus forming a small enlargement & neck for the purpose of attaching rubber tubing.

Thus the invention consists of a tube having one end of necessity bulbous for the purpose of dilating a closed cavity, the vagina, and having a bore through which fluids shall pass for hygienic & curative purposes. But as a modification, instead of the bore passing right through, I adopt the method in manufacture of stopping the bore about the middle, or further, of the bulb, as seen in Fig 5 section. Then to finish the bore I make a saw-cut commencing & cutting the circumference of the bulb at its extreme end *m*, the cut continuing as a bisection down to a little distance beyond the end of the bore *o*, as indicated by the interrupted line *s*. One or more similar cuts can be added if required, crossing the first. In this modification I maintain the original scheme by having a tube made in one piece, having one bore which may enlarge or expand at either end. The enlargement of bore at the bulb end is designed to distribute fluid, whether such enlargement or expansion be effected by increasing a circular calibre or whether it be met by a slot expansion at the extreme end. A slot expansion of the bore is further designed to prevent, by its narrowness as an exit, the return of particles in a back flow from the vagina.

In the invention & modifications, a slight bend in the neck below the bulb, may be adopted if desired.

Having now particularly described & ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

An improved vaginal tube made out of metal, glass, vulcanite, earthenware or some such suitable material, which has a spherical or bulbous enlargement at one end, of a size on an average about three times the circumference of the neck of the shaft of the tube. The bulbous enlargement is not followed out in the bore, the latter being of different form; and this enlargement is designed to dilate the vagina, while fluid passes through the tube into the vagina. There are no angles, cavities, or roughnesses to collect matter or injure parts while the instrument is being used. The tube when completed remains in one piece, not taking to pieces either in manufacture or use; and it has a single bore which may expand or dilate at the extreme end of the bulb in order to distribute the fluid passed through the tube into the vagina, and this expansion or dilatation of bore may be effected either by increasing the calibre of the bore as it emerges or by meeting an unfinished bore by a saw-cut or cuts. The bulb shall not have a concave or hollow wall surrounding its bore, excepting in the case of glass, but in this instance the hollow wall surrounding the bore has no communication with the bore.

Dated this 14th. day of November 1901.

HAYDN BROWN.

Redhill: Printed for His Majesty's Stationery Office, by Malcomson & Co., Ltd.—1902.

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A.D. 1901. JULY 1. Nº. 13,361.

BROWN'S PROVISIONAL SPECIFICATION

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Fig. 1.

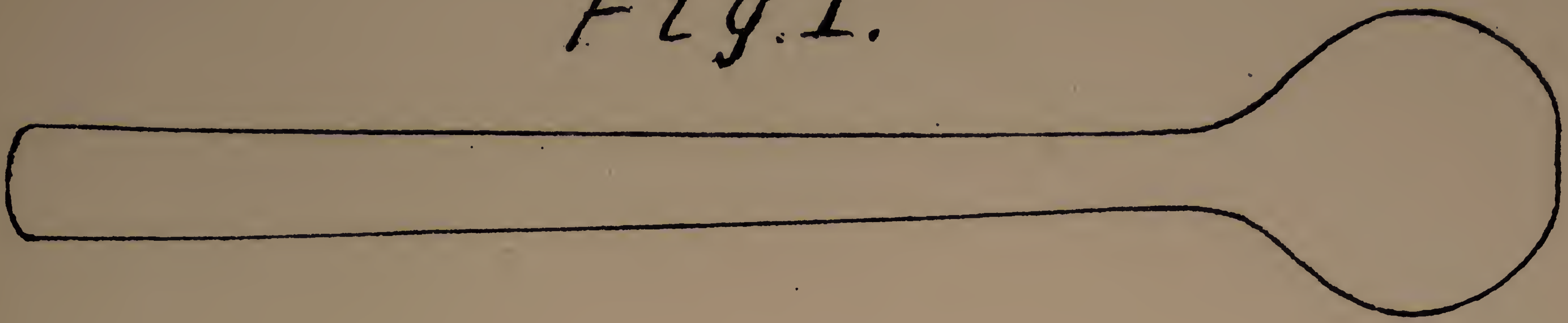


Fig. 2.

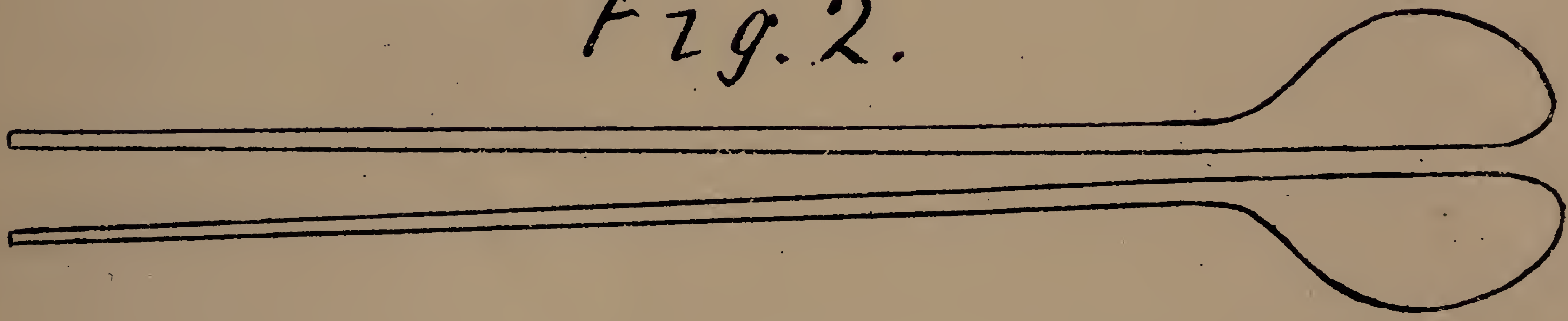
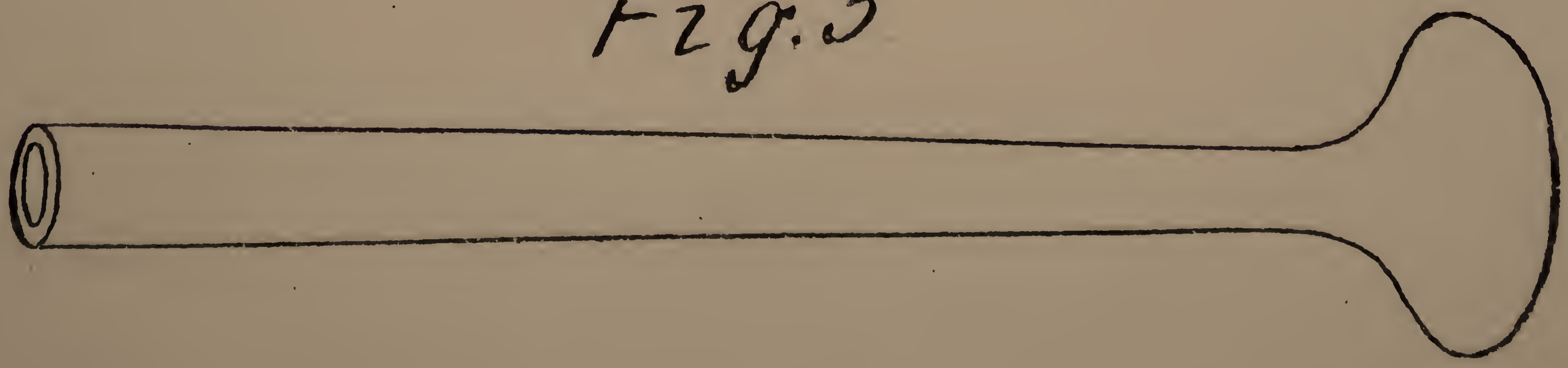


Fig. 3



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A.D. 1901. July 1. N°. 13,361.
BROWN'S Complete Specification.

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Fig. 1.

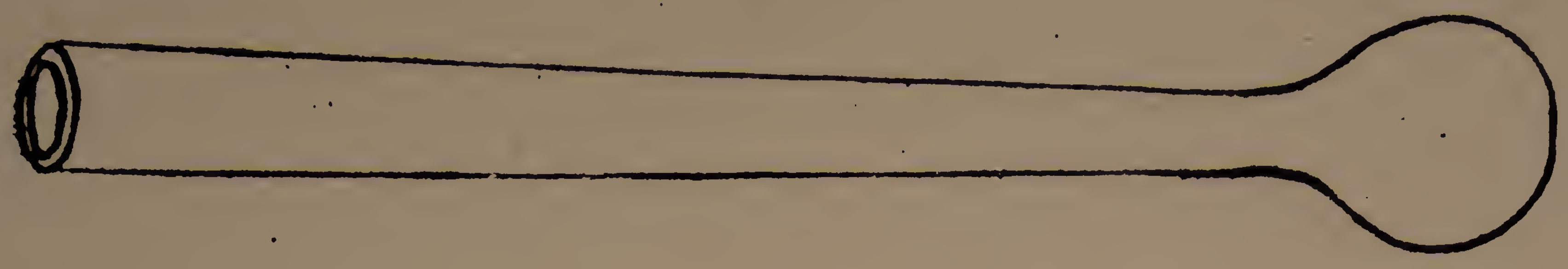


Fig. 2.

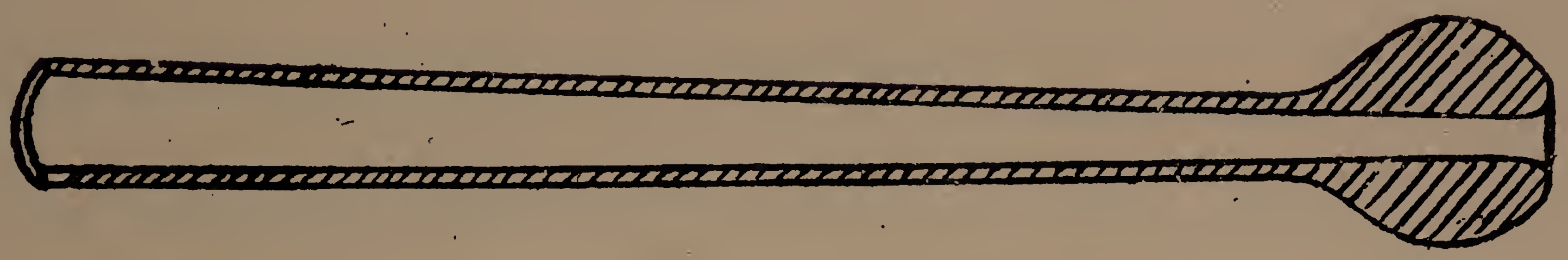


Fig. 3.

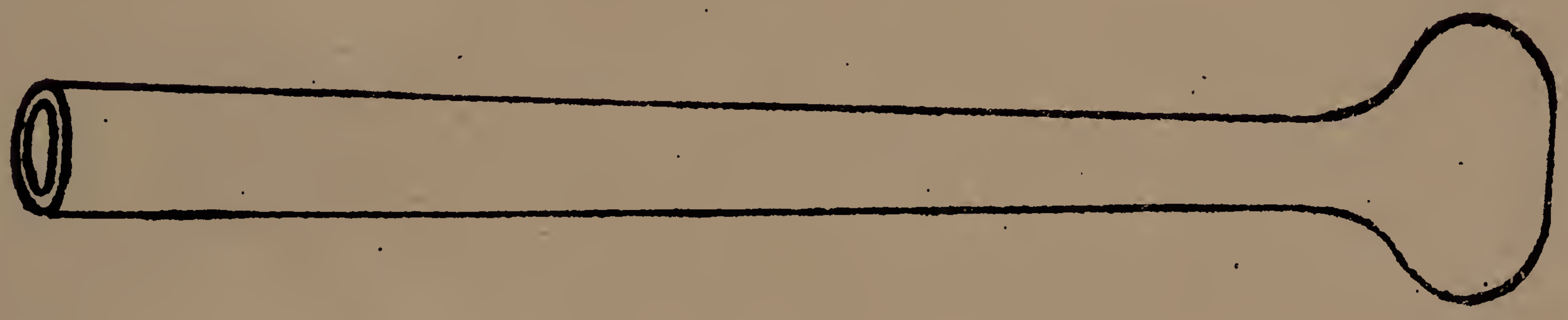


Fig. 4.

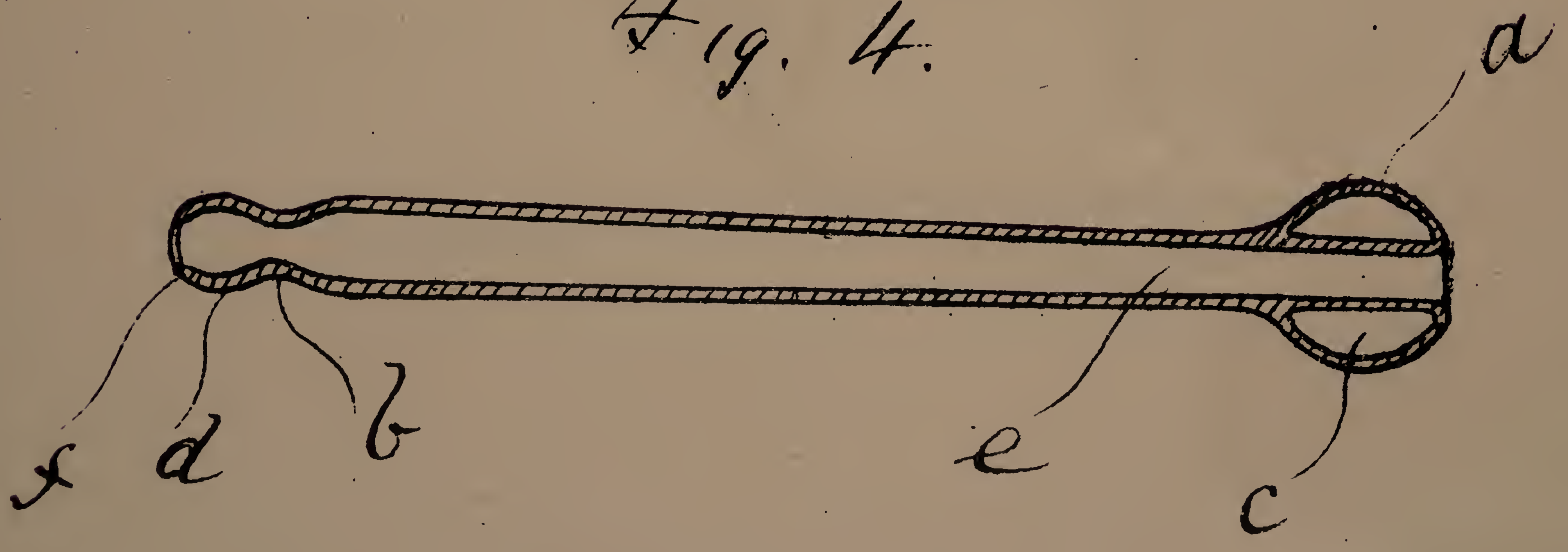
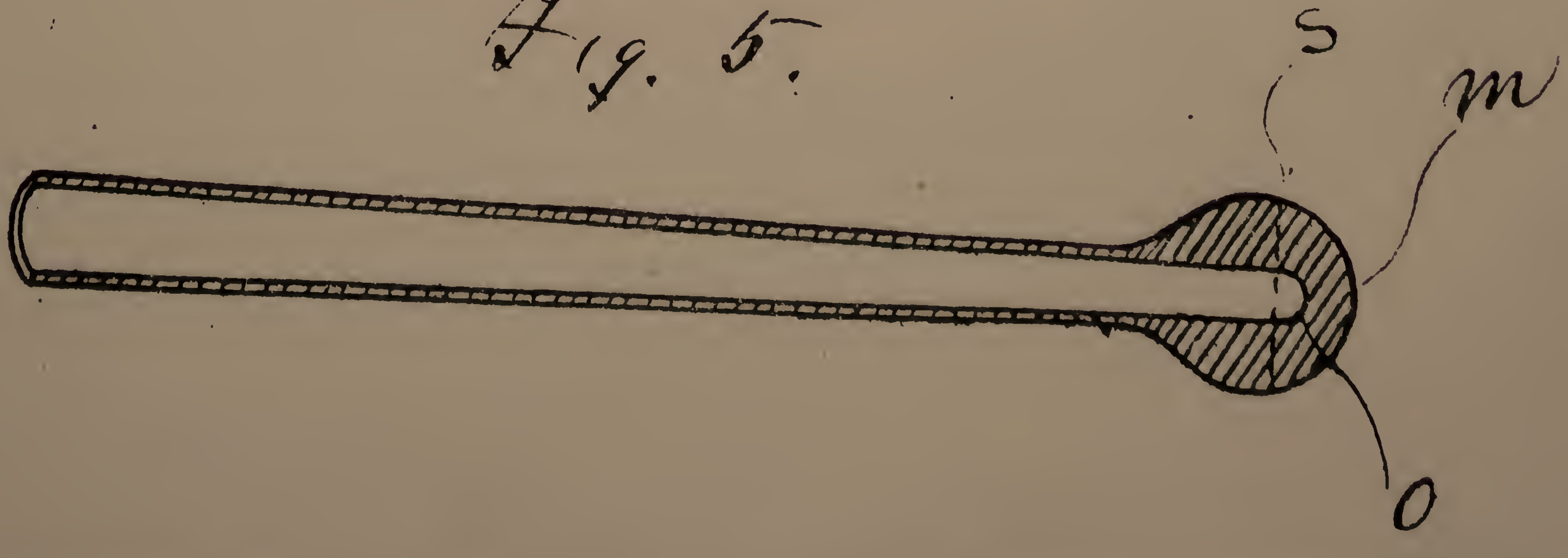


Fig. 5.



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